

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-7 (Cancelled).

8 (Currently amended). A method for detection of an individual with a high probability of having an HIV infection, comprising the steps of:

- [[i]] obtaining a peripheral blood sample from said individual;
- ~~(ii) separating mononuclear cells from said peripheral blood;~~
- ~~(iii) fixing and permeabilizing said mononuclear cells;~~
- ~~(iv) incubating said fixed and permeabilized mononuclear cells with MAb which bind to the M02 antigen under conditions enabling binding of the Mabs to said antigen;~~
- ~~(v) detecting binding of said antibodies in said cells;~~

and

determining the number of M02 positive cells in said sample;

and

~~expressing the M02 antigen internally and/or the intracellular level of M02 expression in said cells;~~

~~(vi) calculating~~ comparing the number of M02+ cells in said sample with a cutoff value based on an average number of M02+ cells or average level of M02 expression in samples obtained from healthy individuals; and,

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~~(vii) comparing the number of M02+ cells and/or level of expression of M02 in said cells measured in (v) above to said cutoff value, a measured wherein a number of M02+ cells and/or level of expression of M02 in said cells in said sample higher than the cutoff value, indicating said cutoff value indicates a high probability of the existence of an HIV infection in said tested individual.~~

9 (Currently amended). A method in accordance with Claim 8, wherein ~~following or simultaneously with the incubation of said fixed and permeabilized cells with MAbs which bind M02, said cells are also incubated with MAbs which bind T cell specific antigens and the number of M02+ cells~~ M02+ cells which also bind said anti-T cell MAbs monoclonal antibodies (MAbs) specific for T-cell specific antigens in said sample as well as the level of M02 expression in said cells is determined and compared to the number of cells which bind M02 and said anti-T-cell specific MAb ~~or the level of M02 in such cells in control non-infected individuals, a higher number of M02+ cells or a higher level of M02 expression in said tested individual indicating~~ indicates a high probability of the existence of an infection in said tested individual.

10 (Original). A method in accordance with Claim 9, wherein said anti-T-cell specific antigen is CD8.

11 (Original). A method in accordance with Claim 9, wherein said T-cell specific antigen is CD4.

12(Original). A method in accordance with Claim 9, wherein said T-cell specific antigen is the gamma/delta receptor.

13(Currently amended). A method for monitoring the efficacy of [[a]] anti-HIV treatment on a cellular level in an infected individual infected with HIV, comprising:

[[(i)]] obtaining a peripheral blood sample from said individual;
~~prior to administration of said treatment;~~
~~(ii) separating mononuclear cells from said peripheral blood;~~
~~(iii) fixing and permeabilizing said mononuclear cells;~~
~~(iv) incubating said fixed and permeabilized mononuclear cells~~
~~with MAbs which bind to the MO2 antigen under conditions~~
~~enabling binding of the MAbs to said antigen;~~
~~(v) detecting binding of said antibodies in said cells, and~~
~~determining the number of MO2+ cells in said sample;~~
~~expressing the MO2 antibody internally and/or the~~
~~intracellular level of MO2 expression in said cells;~~
~~(vi) administering said treatment to [[the]] said individual;~~
at one or more time points during or after said treatment,
obtaining a peripheral blood sample from said individual and
determining the number of MO2+ cells in each sample; and
comparing the number of MO2+ cells in the sample obtained
prior to treatment with the number of MO2+ cells obtained during or
after said treatment,
wherein a significantly different number of MO2+ cells
present in the sample obtained prior to treatment as compared to the

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number of MO2+ cells present in the sample obtained during or after
said treatment indicates efficacy of said treatment

~~(vii) at various periods of time following said treatment
obtaining a peripheral blood sample from said treated
individual;
(viii) determining the number of cells in said samples expressing
the M02 antigen internally and/or the intercellular level
of M02 expression in said cells as in step (ii) (v) above;
(ix) comparing the number of said cells and/or said level of
expression of M02 in the cells in the sample obtained in
(i) to the number of said cells and/or the level of M02
expression in samples obtained from said individual
following treatment, a significantly different number of
MO2+ cells or a significantly different level of expression
of M02 in cells present in samples obtained from said
treated individual as compared to the number of MO2+ cells
or the level of M02 expression in cells in a sample
obtained prior to said treatment indicating efficacy of the
treatment.~~

14(Currently amended). A method in accordance with Claim 13,
wherein ~~following or simultaneously with incubation of said cells in~~
~~said (iv) with Mabs which bind the M02 antigen, the cells are also~~
~~incubated with antibodies which bind T cell specific antigens, the~~
number of MO2+ cells which bind said Mabs that bind monoclonal
antibodies (Mabs) specific for T-cell specific antigens is determined
before and after said treatment and the number of said MO2+ cells or

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~~the level of expression of M02 in said cells is compared to the number of said M02+ cells or the level of M02 expression in said cells in samples obtained from said individual prior to receiving treatment[[]], a significantly different number of said M02+ cells before and after treatment and/or of the level of expression of M02 in said cells indicating efficacy of said treatment.~~

15(Original). A method in accordance with Claim 14, wherein said additional T-cell specific antigen is CD8.

16(Original). A method in accordance with Claim 14, wherein said additional T-cell; specific antigen is CD4.

17(Original). A method in accordance with Claim 14, wherein said additional T-cell specific antigen is gamma/delta receptor.

Claims 18-20 (Cancelled).

21(Currently amended). A method in accordance with any of Claims[[8-17]] 9-12 and 14-17, wherein the MABs which bind to the M02 antigen are labeled with Red Dye No. 1 (RD1).

Claim 22 (Cancelled).